

30-2905: Anti-Hu CD141 Mab (M80)

Clonality :	Monoclonal
Clone Name :	M80
Application :	FACS
Reactivity :	Human
Gene :	THBD
Gene ID :	7056
Uniprot ID :	P07204
Format :	Purified
Alternative Name :	Thrombomodulin, fetomodulin, THBD, THRM, THPH12, TM
Isotype :	Mouse IgG1
Immunogen Information :	MV4-11 cell line

Description

Specificity: The mouse monoclonal antibody M80 recognizes an extracellular epitope of CD141, a 75 kDa transmembrane glycoprotein expressed mainly on macrophages, monocytes, platelets and endothelial cells.

CD141, also known as thrombomodulin or fetomodulin, is a single chain type I transmembrane glycoprotein serving as a receptor for thrombin and as an important cofactor in the protein C anticoagulant system, but it is also involved in embryonic and atherosclerotic plaque development. CD141 is expressed mainly on macrophages, monocytes, a subpopulation of myeloid dendritic cells, on platelets and endothelial cells, but also e.g. on keratinocytes (epithelium). After binding to thrombin, CD141 activates protein C, which degrades clotting factors Va and VIIIa, and as a consequence the amount of thrombin is reduced. Mutations in the CD141 gene can cause a thromboembolic disease known as inherited thrombophilia.

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography.
Content :	Concentration: 1 mg/ml Storage Buffer: Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow cytometry: Recommended dilution: 1-5 µg/ml

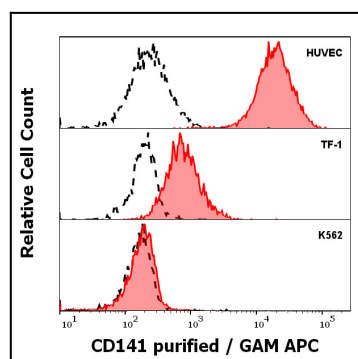


Figure 1: Anti-Hu CD141 purified antibody (clone M80) specificity verification by flow cytometry Anti-Hu CD141 purified antibody (concentration in sample 0.3 $\mu\text{g/ml}$, GAM APC, red-filled histogram) binds specifically to CD141 on surface of HUVEC cells with high expression of CD141 (upper panel) and also TF-1 cells with lower CD141 expresion (middle panel), but not to surface of K562 cells non-expressing CD141 (lower panel). Level of non-specific binding was assessed using cells unstained by primary antibody (GAM APC, black-dashed histogram).